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comprises routing the search query to the query server addresses specified by the one or more of the provider registrations selected by said resolving.

Please add the following claims 30-70.

(Added) The method as recited in claim 2, wherein the markup language is eXtensible Markup Language (XML).

Lour 1 25 27. (Added) The method as recited in claim 9, wherein the markup language is eXtensible Markup Language (XML).

Ba Lan

Lauk 32. (Added) The method as recited in claim 1, wherein said receiving a query request from a consumer, said resolving the search query with an index of provider registrations, said routing the search query to at least one provider, said receiving a query response from said at least one provider, and said routing the search results to the consumer implement deep search of said at least one provider on the distributed network.

Luck 13 38. (Added) The method as recited in claim 1, wherein said receiving a query request from a consumer, said resolving the search query with an index of provider registrations, said routing the search query to at least one provider, said receiving a query response from said at least one provider, and said routing the search results to the consumer implement wide search of the distributed network.

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(Added) The method as recited in claim 1, wherein the search results include information in text format.

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(Added) The method as recited in claim 1, wherein the search results include information in audio format.

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(Added) The method as recited in claim 1, wherein the search results include information in video format.

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(Added) The method as recited in claim 1, wherein the search results include information in image format.

fauth 38. (Added) The network hub as recited in claim 11, wherein the search results include one or more of text, audio, video and image information.

(Added) The network hub as recited in claim 11, wherein the router is further configured to receive the query requests and query responses according to a query routing protocol, wherein the query routing protocol specifies a markup language format for communicating query requests and query responses.

Auxil. 126 38 322 23 39 40. (Added) The network hub as recited in claim 39, wherein the markup language is eXtensible Markup Language (XML).

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24 40 41. (Added) The network hub as recited in claim 10, wherein each search query comprises:

an indication of a query-space, wherein the query-space defines a structure for indicating and matching search criteria; and

search criteria structured according to the indicated query-space.

Run 1. (Added) The network hub as recited in claim A1, wherein each provider registration comprises:

an indication of a query-space, wherein the query-space defines a structure for indicating and matching search criteria;

a predicate statement structured according to the indicated query-space, wherein the predicate statement defines matching search criteria; and

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a query server address to which matching search queries are to be directed.

(Added) The network hub as recited in claim 42, wherein for each search query said resolver is further configured to:

> apply the search criteria from the search query to the provider registrations indicating the same query-space as the search query; and

> select the provider registrations that have both the same query-space as said search query and a predicate statement matching the search criteria from

the search query.

29 Rull, 124 42 26 (Added) The network hub as recited in claim 43, wherein said router is configured to route each search query to the query server addresses specified by one or more of the provider registrations selected by said resolver.

Ruch 1.12628 45. (Added) The network hub as recited in claim 10, wherein said router is further configured to:

receive registration requests from a plurality of providers, wherein each registration request comprises a registration file, wherein the registration file comprises an address and a definition of search queries to be sent to the address; and

store the registration files in the index of provider registrations.

(Added) The network hub as recited in claim 16, wherein the router is configured to receive the registration requests according to a query routing protocol, wherein the query routing protocol specifies a markup language format for communicating query requests, query responses and registration requests.

Rack 1,126 11.126 4529 The network hub as recited in claim 46, wherein the markup language is eXtensible Markup Language (XML).

Ruch 1.126 31 Added) A carrier medium comprising program instructions, wherein the program instructions are computer-executable to implement:

receiving a query request from a consumer, wherein the query request includes a search query;

resolving the search query with an index of provider registrations to select one or more provider registrations;

routing the search query to at least one provider specified by the one or more selected provider registrations;

receiving a query response from said at least one provider, wherein the query response includes search results; and

routing the search results to the consumer.

A1.126 4731 Ruth 1.126 47 1.126 4 request and the query response are formatted according to a query routing protocol, wherein the query routing protocol specifies a markup language format for communicating query requests and query responses.

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Ruth (Added) The carrier medium as recited in claim 49, wherein the markup

language is eXtensible Markup Language (XML).

A1144731 (Added) The carrier medium as recited in claim 48, wherein said search query comprises:

an indication of a query-space, wherein the query-space defines a structure for indicating and matching search criteria; and

search criteria structured according to the indicated query-space.

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[Added] The carrier medium as recited in claim \$1, wherein each provider registration comprises:

an indication of a query-space, wherein the query-space defines a structure for indicating and matching search criteria;

a predicate statement structured according to the indicated query-space, wherein the predicate statement defines matching search criteria; and

a query server address to which matching search queries are to be directed.

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(Added) The carrier medium as recited in claim 52, wherein said resolving comprises:

applying the search criteria from the search query to the provider registrations indicating the same query-space as the search query; and

selecting the provider registrations that have both the same query-space as said search query and a predicate statement matching the search criteria from the search query.

(Added) The carrier medium as recited in claim 58, wherein said routing the search query to at least one provider specified by the one or more selected provider registrations comprises routing the search query to the query server addresses specified by the one or more of the provider registrations selected by said resolving.

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Added) The carrier medium as recited in claim 48, wherein said receiving a query response from at least one provider comprises collating search results received from a plurality of providers, and wherein said routing the search results comprises routing the collated search results to the consumer.

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(Added) The carrier medium as recited in claim 48, wherein the program instructions are further computer-executable to implement:

receiving registration requests from a plurality of providers, wherein each registration request comprises a registration file, wherein the registration file comprises an address and a definition of search queries to be sent to the address; and

storing the registration files in the index of provider registrations.

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Added) The carrier medium as recited in claim 56, wherein the registration requests, the query request and the query response are all formatted according to a query routing protocol, wherein the query routing protocol specifies a markup language format for communicating query requests, query responses and registration requests.

Ruch 1:155. (Added) The carrier medium as recited in claim 57, wherein the markup language is eXtensible Markup Language (XML).

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(Added) A network hub coupled to a network, comprising:

means for routing query requests received from consumers coupled to the network, wherein each query request includes a search query;

means for resolving the search queries, wherein said means for resolving are configured to:

receive the search queries from said means for routing;

access a provider registration index; and

resolve each search query with the provider registration index to select one or more provider registrations for each search query;

wherein said means for routing are further configured to:

receive from said means for resolving an indication of one or more providers selected for each search query; and

route each search query to the one or more selected providers for that search query.

Ruth 13 1,126 58 42 1,126 58 42 60.8 (Added) The network hub as recited in claim 59, wherein said means for routing are further configured to receive query responses from providers coupled to the network, wherein each query response includes a search query identifier and search results.

Authority Al. (Added) The network hub as recited in claim 60, wherein the search results include one or more of text, audio, video and image information.

(Added) The network hub as recited in claim 60, wherein said means for routing are further configured to receive the query requests and query responses according to a query routing protocol, wherein the query routing protocol specifies a markup language format for communicating query requests and query responses.

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(Added) The network hub as recited in claim 62, wherein the markup language is eXtensible Markup Language (XML).

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(Added) The network hub as recited in claim 59, wherein each search query comprises:

an indication of a query-space, wherein the query-space defines a structure for indicating and matching search criteria; and

search criteria structured according to the indicated query-space.

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The network hub as recited in claim 64, wherein each provider registration comprises:

an indication of a query-space, wherein the query-space defines a structure for indicating and matching search criteria;

a predicate statement structured according to the indicated query-space, wherein the predicate statement defines matching search criteria; and

a query server address to which matching search queries are to be directed.

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49 15 66. (Added) The network hub as recited in claim 65, wherein for each search query said means for resolving are further configured to:

apply the search criteria from the search query to the provider registrations indicating the same query-space as the search query; and

select the provider registrations that have both the same query-space as said search query and a predicate statement matching the search criteria from the search query.

(Added) The network hub as recited in claim 66, wherein said means for routing are further configured to route each search query to the query server addresses specified by one or more of the provider registrations selected by said means for resolving.

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Slot 68. (Added) The network hub as recited in claim 59, wherein said means for routing are further configured to:

receive registration requests from a plurality of providers, wherein each registration request comprises a registration file, wherein the registration file comprises an address and a definition of search queries to be sent to the address; and

store the registration files in the index of provider registrations.

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(Added) The network hub as recited in claim 59, wherein said means for routing are further configured to receive the registration requests according to a query routing protocol, wherein the query routing protocol specifies a markup language format for communicating query requests, query responses and registration requests.

Ruin 1.12 65 52 65 70. (Added) The network hub as recited in claim 69, wherein the markup language is eXtensible Markup Language (XML).

## **REMARKS**

Claims 1-29 were pending. Applicants have amended claim 6, cancelled claims 14-29 and added claims 30-70. Due to a numbering error there is no claim 13. Thus claims 1-12 and 30-70 are pending after entry of this amendment.